

What is claimed is:

- 1 1. A method for rendering an image on a display and producing magnification in the
2 rendered image comprising:
 - 3 selecting a set of polygon data to which to apply the magnification special effect;
 - 4 retaining eye point δ angle data within the vertex data passed to the a graphics
5 rendering pipeline;
 - 6 perturbing each eye point δ angle value at each polygon fragment; and
 - 7 incorporating perturbed texel angles, where each texel has a U and a V
8 coordinate.
- 1 2. The method according to claim 1 wherein perturbing each eye point δ angle value
2 comprises multiplying eye point δ angle by a value N, and providing a corresponding
3 offset to each texel coordinate.
- 1 3. The method according to claim 1 wherein the texel coordinates are offset by an
2 eye point angle.
- 1 4. The method according to claim 3 wherein the texel coordinates are offset by the
2 eye point angle and by a value N.
- 1 5. A method according to claim 3 wherein accessing eye point δ angle data for each
2 texel to be produced comprises accessing data for selected vertices describing a polygon
3 and further comprising interpolating eye point δ angle data for each texel to be produced
4 between texels including said vertices.
- 1 6. The method according to claim 5 further comprising resolving an eye point δ
2 angle into eye point δ angle x in an X-Z plane and eye point δ angle y in a Y-Z plane.

1 7. The method according to claim 6 wherein comprising producing magnification
2 for a selected polygon on said display comprises displaying texels in the selected
3 polygon and selecting texels based on the modified U and V mapping derived through
4 using the eye point angles.

1 8. A machine-readable medium that provides instructions which, when executed by
2 a processor, cause said processor to perform operations producing a magnifying special
3 effect in a computer display comprising:

4 selecting a set of polygon data to which to apply the magnification special effect;

5 retaining eye point δ angle data within the vertex data passed to the graphics
6 rendering pipeline;

7 perturbing each eye point δ angle value at each polygon fragment; and

8 providing perturbed texel angle data.

1 9. A machine-readable medium according to claim 8 that provides instructions
2 which, when executed by a processor, cause said processor to perform operations
3 perturbing texel coordinates U and V using eye point δ angle value comprises
4 multiplying eye point δ angle by a value N.

1 10. A machine-readable medium according to claim 9 that provides instructions
2 which, when executed by a processor, cause said processor to perform operations
3 accessing data for the set of vertices describing a polygons and interpolating eye point δ
4 angle data for each texel to be produced between texels including said vertices.

1 11. A machine-readable medium according to claim 10 that provides instructions
2 which, when executed by a processor, cause said processor to perform resolving an eye
3 point δ angle into eye point δ angle x in an X-Z plane and eye point δ angle y in a Y-Z
4 plane.

1 12. A machine-readable medium according to claim 10 that provides instructions
2 which, when executed by a processor, cause said processor to perform operations
3 comprising producing magnification for a selected area of said display by modifying the
4 U and V texel coordinates by offsetting them with the eye point angle x and y
5 components.

1 13. A graphics pipeline converting polygon data to display data and further
2 comprising a means to modify to texel coordinates according to eye point δ angles to
3 allow a portion of a rendered image generated from the polygon data to have a
4 magnification effect applied.

1 14. The graphics pipeline according to claim 13 wherein said processor comprises a
2 multiplier system for establishing relationship projection angle = N eye point δ value.

1 15. The graphics pipeline of Claim 13 further comprising means applying the
2 magnifying effect only to selected polygons.